

Docket No. 113669-5178A  
US App. No. 10/720,143

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**REMARKS**

Claims 28-40, 42-48, and 50-53 are currently pending in this application. Claims 41 and 49 have been canceled. Claims 29-40, 42-48, and 50-53 have been amended. No new matter has been added. Support for the amendments can be found throughout the specification and in the original claims.

The following remarks put the pending claims in condition for allowance. Applicants respectfully request reconsideration and the timely allowance of the pending claims.

**Priority**

Applicants note that a proper claim of priority to U.S. Application No. 10/040,679 was not made as required by 37 CFR 1.78(a) in the required time period. However, Applicants respectfully direct the Office's attention to MPEP 201.11, III, D. Applicants submit herewith a copy of the Utility Patent Application Transmittal form used to file the instant application on November 25, 2003 and a copy of the Filing Receipt received by Applicants on February 27, 2004. The Office will note that (1) the Transmittal form includes a statement that the application being transmitted is a continuation of prior application No. 10/040,769 and (2) the filing receipt correctly lists the Domestic Priority stating "[T]his application is a CON of 10/040,679 11/08/2001 ABN." Thus, Applicants believe that neither a petition under 37 CFR 1.78(a) nor a surcharge under 37 CFR 1.17(t) are required to perfect Applicant's priority claim. Accordingly, in lieu of the above and the present amendment inserting the proper reference in accordance with 37 CFR 1.78(a), Applicants respectfully request that the Office withdraw any objection to Applicant's claim of domestic priority.

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**BEST AVAILABLE COPY****Specification**

The specification has been objected to for numerous typographical errors incorrectly listing a cited patent number. By the present amendment, these errors have been corrected. Accordingly, Applicants respectfully request all objections to the specification be withdrawn.

**35 U.S.C. § 112 Rejections**

Claims 29-38, 41-45, and 47-52 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention

Specifically, the Office notes that these claims improperly depend from canceled claims. These claims have been amended to provide proper dependence. Therefore, Applicants respectfully request the withdrawal of all rejections of the claims based on 35 U.S.C. § 112, second paragraph.

**35 U.S.C. § 102(b) Rejection Based on Bussani et al.**

Claims 40, 46, and 53 stand rejected under 35 U.S.C. 102(b) as being anticipated by Bussani et al., European Patent Application No. 0 415 417 A2, (hereinafter "Bussani").

As currently amended, each of these claims is drawn to a surgical arm system including a holding component comprising a ball shaped member wherein the diameter of the ball shaped member is movable between first and second positions by supplying and discontinuing a supply of pressurized gas to the ball shaped member. The holding component is sized to retain a portion of a surgical instrument.

Bussani fails to teach such a surgical arm system. Bussani teaches a surgical arm system including a sensing and regulating component 72 wherein a surgical instrument can be retained. Specifically, Bussani teaches that a retractor blade can be connected to connecting mechanism 76 (see Fig. 3 and col. 9, line 39 through col. 10, line 20).

Bussani fails to teach that connecting mechanism 76 includes a ball shaped member

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wherein the diameter of the ball shaped member is movable between first and second positions by supplying and discontinuing a supply of pressurized gas to the ball shaped member. In fact, Bussani fails to provide any details as to how retractor blade 70 is connected to connecting mechanism 76. Further, the Office's apparent reliance on Fig. 2 is ill-founded. Fig. 2 depicts a typical ball joint connection that is present between arm segments 14 and 16 (see col. 7, lines 33-51 and col. 8, lines 19-51). Bussani provides no teaching that such a ball joint could be used to retain a surgical instrument. Further, the ball joint shown in Fig. 2 is completely different from the ball shaped member required by the claims, as amended. Ball 82 is rigid and is not connected any pressurized gas source and as such is not capable of undergoing a change in diameter from a first position to a second position. Rather, pressure on flexible solid plug 88 forces cup 84 against ball 82 and sandwiches ball 82 between cup 84 and cap 86.

Since Bussani fails to teach each and every limitation of the claims, Bussani cannot anticipate the claimed invention. Accordingly, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 102(b) based on Bussani of claims 40, 46, and 53.

**35 U.S.C. § 102(e) Rejection Based on Bohanan et al.**

Claims 40, 46, and 53 stand rejected under 35 U.S.C. 102(e) as being anticipated by Bohanan et al., U.S. Patent No. 6,632,170, (hereinafter "Bohanan").

As currently amended, each of these claims is drawn to a surgical arm system including a holding component comprising a ball shaped member wherein the diameter of the ball shaped member is movable between first and second positions by supplying and discontinuing a supply of pressurized gas to the ball shaped member. The holding component is sized to retain a portion of a surgical instrument.

Bohanan fails to teach such a surgical arm system. Bohanan teaches a surgical arm system including a wrist assembly 38 adapted to retain ball 176 connected to quick-disconnect type connector 48 which is sized to retain a portion of surgical instrument (see Fig. 12 and col. 4, lines 22-37). Bohanan fails to teach that quick-disconnect type connector 48 includes a ball shaped member wherein the diameter of the ball shaped

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member is movable between first and second positions by supplying and discontinuing a supply of pressurized gas to the ball shaped member. In fact, Bohanan fails to provide any details as to how a surgical instrument is connected to quick-disconnect type connector 48. Further, the Office's apparent reliance on ball joint 44 is ill-founded. Ball joint 44 is used to retain ball 176 on the proximal end of quick-disconnect type connector 48 in sleeve 178. Bohanan provides no teaching that such a ball joint could be used to retain a surgical instrument. Further, the ball joint shown in Fig. 13 is completely different from the ball shaped member required by the claims, as amended. Ball 176 is rigid and is not connected any pressurized gas source and as such is not capable of undergoing a change in diameter from a first position to a second position. Rather, pressure on break 182 forces ball 176 against sleeve 178 and sandwiches ball 176 between break 182 and sleeve 178.

Since Bohanan fails to teach each and every limitation of the claims, Bohanan cannot anticipate the claimed invention. Accordingly, at least for these reasons, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 102(e) based on Bohanan of claims 40, 46, and 53.

#### **Allowable Subject Matter**

Applicants note that claims 28 and 39 have been indicated as being allowed. Applicants further note that the Office has provided reasons for allowance stating that "the prior art, including Bussani and Bohanan, either alone or in combination, fail to teach or disclose the specifics of the quick connect member and adapter as set forth in claim 28." Applicants agree with the Office's assessment and further submit that the prior art fails to teach or suggest the claimed details of the holding component of claim 28. Specifically, the prior art fails to teach or suggest a holding component for holding a retaining element wherein at least one retention guard is disposed within the retaining element.

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**CONCLUSION**

Applicants believe this response to be a full and complete response to the Office Action. In view of the foregoing, Applicants respectfully request reconsideration and allowance of claims 28-40, 42-48, and 50-53. As the application is believed to be in condition for allowance, Applicants respectfully request a Notice of Allowability. The Examiner is invited to contact the undersigned representative should any further issues arise

Respectfully submitted,

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